



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,081	12/14/2004	Peter Dam Nielsen	893-011876-US (PAR)	2106
2512	7590	09/21/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LAM, DUNG LE	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/502,081	Applicant(s) NIELSEN, PETER DAM	
	Examiner Dung Lam	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13, 14 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-11, 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Andrews** (US Patent No. 5,911,121) in view of **Gum** (US Patent No. 6,477,390) in further view of **White et al.** (US Publication No. 2005/0026643).

3. Regarding **claim 1**, **Andrews** teaches a method operating electric circuitry included in an exchangeable cover part (44, Fig. 2) for supporting a user interface of a wireless terminal (10, Fig. 2), said wireless communication terminal and said user exchangeable cover part are electrically interconnected by means of an electrical connector (60, Fig. 3) having a plurality of pins (C1, C2, C3, Fig. 4), said method comprises: identifying a type of said user exchangeable cover part and (Col. 3, line 34-39); user exchangeable cover part and (Col. 3, line 34-39); operating at least one of said connector pins in an identification state for sensing a value included in an identification cover type indicator (Col. 3, line 34-39); and afterwards operating at least one of the connector pins in an operation state for operating the electric circuitry of said user exchangeable cover part (Col. 3, line 41 - Col. 4, line 22, Table 1). However, Andrews does not explicitly teach a user-

Art Unit: 2617

defined mapping of a set of tones or sound effects to the one of more keys connected to said electric circuitry of said user exchangeable cover. In an analogous art, **Gum** teaches a user-defined mapping of a set of audio tones to one or more keys (Col. 2 L9-14, Col. 4-6 especially C6 In 30-65, Figs. 1, 3-4). Therefore, it would have been obvious for one skill in the art at the time of the invention to combine Andrew's exchangeable cover and Gum's teaching of a user-defined mapping of enunciating certain audio tones to the keys to provide a user-friendly feature in reassuring users in dark environment or sight-impaired users that the correct buttons were pressed (Col. 1 L35-49).

However, **Andrews and Gum** do not specifically teach that said keys are configured for sound creating purposes comprising sound creating applications. In an analogous art, **White** teaches that said keys are connected to said electric circuitry (controller, Fig. 13, para. 08, 10, 47, 60, 62, 66) and wherein said keys are configured to create sound creating purposes comprising music composing applications, sound creating applications (create tunes para. 88), system sound creation (sound generation system, para. 134), sending sounds with multimedia messaging service (par. 87) or any combination thereof. **White** further teaches that the supplier of the fascia may attract buyers by providing additional data such as ringing tones to advertise itself or other companies (para. 60). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine Andrews's user exchangeable cover and Gum's user-defined mapping of the keys to the tone and **White's** keys for sound creating applications or tune creation features to make the fascia more interesting and thus more marketable.

4. Regarding **claim 2**, Andrews, Gum and White teach all the limitations as in claim

1. Andrew further teaches said value is a resistor value included in the cover type indicator (Col. 3, line 54 - Col. 4, line 10).

5. Regarding **claim 3**, Andrews, Gum and White teach all the limitations as in claim

2. White further teaches an operation state is a frequency mode for directing an electrical representation of a ringing signal to the electric circuitry for providing an illumination effect following the ringing signal (para. 102 - 104). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to add the illumination effects following a ringing tone to better inform a user of an incoming call since it is easier to see than hear a notification in a noisy environment.

6. Regarding **claim 4**, it is an apparatus claim corresponding to the method claim 1. Therefore it is rejected for the same reasons as claim 1.

7. Regarding **claim 5**, Andrews, Gum and White teach all the limitations as in claim

4. Andrews further teaches said connector pins are arranged in line in an equal distance (Fig. 9 and 7).

8. Regarding **claim 6**, Andrews, Gum and White teach all the limitations as in claim

5. Although they fail to teach that the connector pins are arranged at the rear side of

Art Unit: 2617

the cover part, changing the location from the front to the rear of the cover does not change the functionality of the cover. Therefore, it would have been obvious for one of ordinary skill in the art to place the pins at the rear as a designer's choice to best fit the rest components of the cover.

9. Regarding **claim 7**, Andrews, Gum and White teach all the limitations as in claim 6. Andrews teaches the number of connector pins is four. He does not teach the number to be three nor five. However, he teaches that there can be 2^n combinations of models that can be supported depending on n number of pins. Therefore, it would have been obvious for one of ordinary skill in the art to choose 3 or 5 pins depending on the number of models the supplier would like to support (Col. 4, lines 17-20).

10. Regarding **claim 9**, Andrews, Gum and White teach all the limitations as in claim 5. Andrew teaches said value is a resistor value included in the cover type indicator (Col. 3, line 54 - Col. 4, line 10).

11. Regarding **claim 10**, Andrews, Gum and White teach all the limitations as in claim 6. White teaches the operation state is a frequency mode for directing an electrical representation of a ringing signal to the electric circuitry for providing an illumination effect synchronized with the ringing signal (para. 102 - 104).

Art Unit: 2617

12. Regarding **claim 13**, it is a cover that corresponds to the exchangeable cover as claimed in claim 4. Therefore it is rejected for the same reason as claim 4.

13. Regarding **claim 16**, Andrews, Gum and White teach all the method according to claim 1 further comprising, running a program stored in a memory located in the user exchangeable cover part located in a processor of the user exchangeable cover part (para. 66-72).

14. Regarding **claim 17**, it is an apparatus that corresponds to the exchangeable cover method claim 16. Therefore, it is rejected for the same reason as claim 16.

15. Regarding **claim 18**, it is a method that corresponds to the exchangeable cover method claim in 16. Therefore it is rejected for the same reason as claim 16.

16. Claims **11 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Andrews** (US Patent No. 5911121) in view of **Gum** (US Patent No. 6,477,390) further in view of **White et al.** (US Publication No. 2005/0026643) further in view of **Zhao** (Patent No. 2004/0204135)

17. Regarding **claims 11 and 14**, Andrews, Gum and White teach all the limitations as in claim 4 and 13 respectively. However, they fail to teach said set of tones and/or sound effects comprise music instrument digital interface tones. In an analogous art, **Zhao** teaches ring tones in the form of MIDI (6, 18, 25, 13 and 18). Therefore, it would have obvious for one of ordinary skill in art at the time of invention to add the MIDI tone as another plus feature into the fascia to make the product more marketable.

Response to Arguments

1. Applicant's arguments filed 1-11, 13 and 14-18 filed on 7/26/06 have been fully considered but they are not persuasive.
2. Applicant argues that the combination of Andrews, White and Gum fail to teach a user defined mapping of a set of tones or sound effects to the one or more keys. The examiner respectfully disagrees. Gum clearly teaches that the keys can be programmed and assigned with distinctive signal and unique audible signals which reads on the limitation of a "user defined mapping of a set of tones or sounds to one or more keys". For example when a key "8" is pressed, the user may hear eight beeps or when a user presses a number "5" key a user may hear a voice that says "five" which are made possible as a result of programming and key mapping/assigning (Col. 6 Ln 30 – 54). Therefore, applicant's argument regarding the missing limitation regarding the "user defined mapping of sound to one or more keys" is moot.
3. Applicant further argues the examiner is using hindsight and that there is no motivation to combine Andrews, Gum and White to achieve the user defined mapping of a set of tones to achieve what the applicant claimed. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d

Art Unit: 2617

1392, 170 USPQ 209 (CCPA 1971). Gum clearly teaches that the kind of “talking” keys allows users to better navigate through keypad. (C6 Ln 51-56). Therefore, it is clear that one of ordinary skill in the art would use this combination to allow the user to individualize his/her phone’s looks and feel.

4. Applicant further argues that the processor is not on the fascia. The examiner disagrees. White teaches that the passive data storage 54 may incorporate a micro-controller that reads out data from memory 59 which are part of the passive data storage 17 (see paragraph 67). As White pointed out in paragraph 38, the passive data storage 17 is part of the fascia. Therefore, applicant's argument that White does not disclose a processor is on the fascia is moot.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL


LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER